

AMENDMENTS TO CLAIMS

1. (Currently Amended) A ~~modulated~~modular optical mouse for a personal computer, the optical mouse comprising:

a body having a predetermined space defined inside the body and having at least one lead securely provided inside the space and electrically connected to at least one contact line extending from the body;

at least one light emitting diode mounted inside the space to electrically connect with the lead, the light emitting diode being at a bottom of the body;

at least one control element received in the space to be electrically connected to the lead;
an optical element received in the space; and

at least one sensor received in the space to electrically connect with the lead and to sense light reflected from a reflective surface by the light emitting diode.

2. (Canceled)

3. (Currently Amended) The modular optical mouse as claimed in claim-~~2~~1, wherein the control element is a control IC.

4. (Canceled)

5. (Currently Amended) The modular optical mouse as claimed in claim-~~4~~1, wherein the optical element is composed of a light guide element adjacent to the light emitting diode and a second light guide element adjacent to the sensor.

6. (Currently Amended) The modular optical mouse as claimed in claim-~~4~~1, wherein the at least one light emitting diode and the at least one sensor are encapsulated inside the body.

Serial Number 10/057,918

7. (Currently Amended) The modular optical mouse as claimed in claim ~~2~~ 1, wherein the light emitting diode, the sensor and the control element are C.O. B. Type.

8. (Previously Presented) The modular optical mouse as claimed in claim 1, wherein the body is ~~so~~ adapted to be attached to a circuit board to align with a through hole in the optical mouse.

9. (Currently Amended) The modular optical mouse as claimed in claim ~~2~~ 1, wherein the sensor and the control element are integrally formed.

10. (Currently Amended) A ~~modulated~~ modular optical mouse for a personal computer, the optical mouse comprising:

 a body having a predetermined space defined inside the body and having at least one lead securely provided inside the space and electrically connected to at least one contact line extending from the body;

 at least one light emitting diode mounted inside the space to electrically connect with the lead, the light emitting diode being at a bottom of the body;

at least one control element received in the space of the body to be electrically connected to the lead;

 an optical element securely received in the space and adjacent to the light emitting diode; and

 at least one sensor received in the space to electrically connect with the lead and to correspond to the light emitting diode,

 whereby the light from the light emitting diode is refracted by the optical element and picked up by the sensor.

11. (Canceled)

12. (Currently Amended) The modular optical mouse as claimed in claim ~~11~~ 10, wherein the control element is a control IC.

Serial Number 10/057,918

13. (Canceled)

14. (Currently Amended) The modular optical mouse as claimed in claim ~~13~~ 10, ~~wherein the optical element is composed of a first lens adjacent to the light emitting diode and further comprising~~ a second lens adjacent to the sensor.

15. (Currently Amended) The modular optical mouse as claimed in claim ~~11~~ 10, wherein the light emitting diode and the at least one sensor are encapsulated inside the body.

16. (Currently Amended) The modular optical mouse as claimed in claim ~~11~~ 10, wherein the light emitting diode, the sensor and the control element are C.O. B. Type.

17. (Previously Presented) The modular optical mouse as claimed in claim 10, wherein the body is adapted to be attached to a circuit board to align with a through hole in the optical mouse.

18. (Currently Amended) The modular optical mouse as claimed claim ~~11~~ 10, wherein the sensor and the control element are integrally formed.

19. (Canceled)